Pre. Ph.D. Course Work (2017 Course) : SUMMER - 2018
(Pharmacology)
SUBJECT: PAPER-II – PHARMACOLOGY

Day : **Tuesday** Time : **10.00 AM TO 01.00 PM**
Date : **26/06/2018** **S-2018-4779** Max. Marks: 100.

N.B.:

1) Attempt any **FIVE** questions from Section-I and any **FIVE** questions from Section-II.
2) Both the sections should be written in **SEPARATE** answer books.
3) Figures to the **RIGHT** indicate full marks.
4) Draw neat and labeled diagrams **WHEREVER** necessary.

SECTION-I

Q.1 Describe in details the regulatory guidelines for animal experimentation. **(10)**

Q.2 Discuss the role of high throughput screening in drug discovery. **(10)**

Q.3 Explain the molecular cellular signaling in G-protein coupled receptors. **(10)**

Q.4 Describe the models of screening of Alzheimer's disease. **(10)**

Q.5 Discuss the production, maintenance and applications of Transgenic animals. **(10)**

Q.6 Write short on any **TWO** of the following: **(10)**

a) Microdialysis
b) Screening for antifertility agents
c) Components of Form B

SECTION-II

Q.7 Describe in details the dermal irritation and dermal toxicity studies. **(10)**

Q.8 Explain in details the ELISA technique and its application. **(10)**

Q.9 Discuss the ethics of clinical trials. **(10)**

Q.10 Explain in detail the origin, concepts and importance of safety pharmacology. Add a note on cardiovascular safety pharmacology. **(10)**

Q.11 Explain the methods and applications of PCR. **(10)**

Q.12 Write short on any **TWO** of the following: **(10)**

a) DNA electrophoresis
b) Renal safety pharmacology
c) Alternative methods to animal toxicity testing

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